



# YAKEEN

## Summary,

## Doubts and Quiz

**BODY FLUIDS AND  
CIRCULATION**



BY 'DR. MANISH DUBEY'





# SUMMARY, DOUBTS AND QUIZ



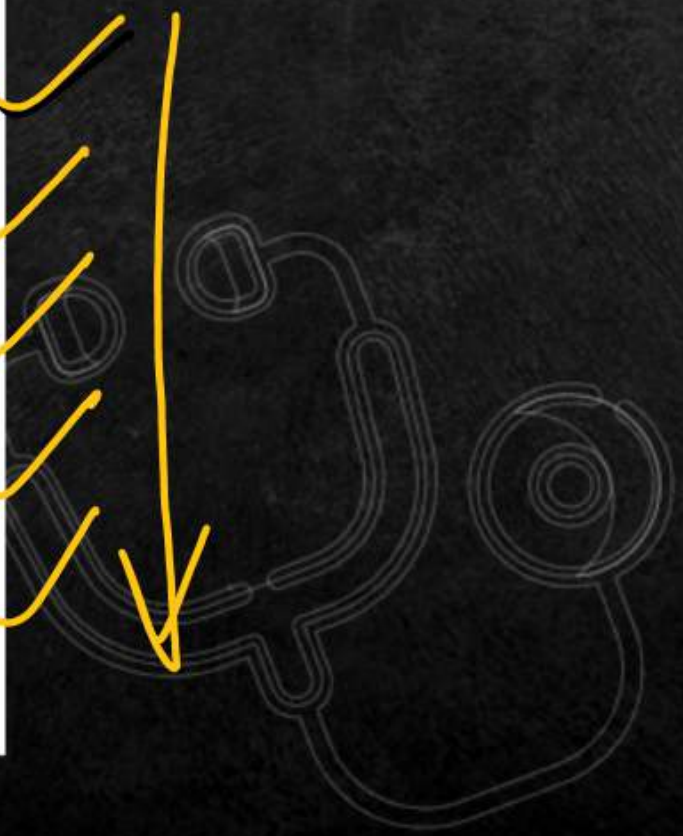
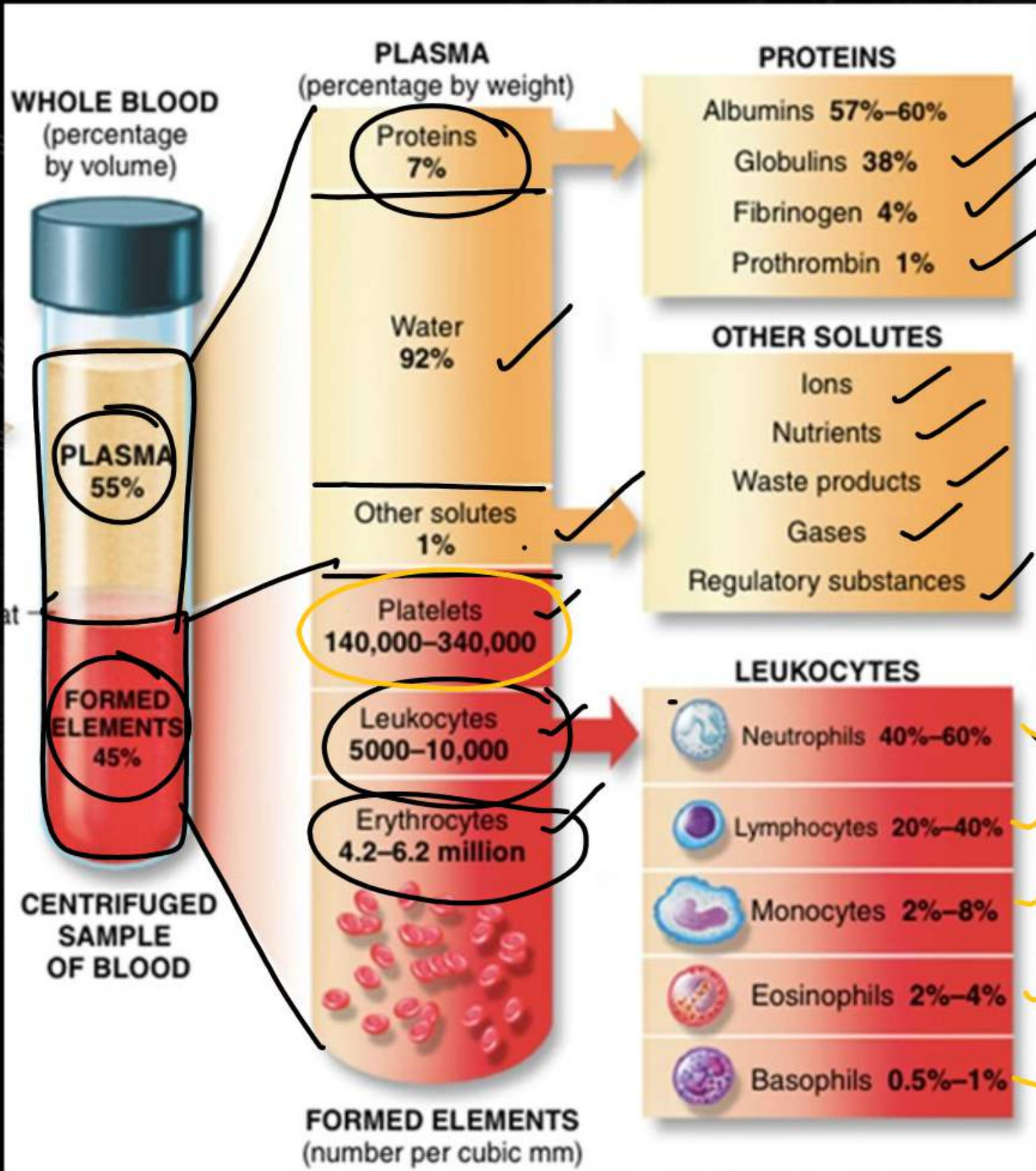
The background is a dark, moody scene of an industrial interior. A single, horizontal light fixture is mounted on the ceiling, casting a soft glow on the wall below it. The wall appears to be made of dark, textured panels or bricks. The overall atmosphere is mysterious and somber.

**SUMMARY**

**PART- 1**

**BLOOD**





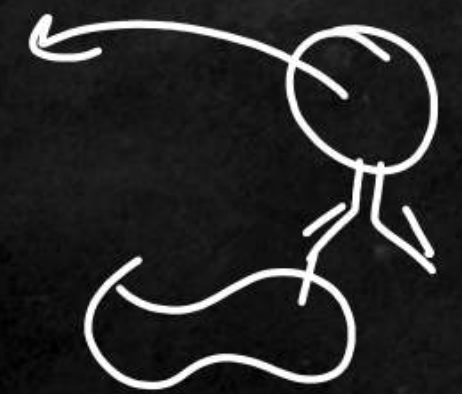


**TABLE 18.1 Blood Groups and Donor Compatibility**

Blood Group	Antigens on RBCs	Antibodies in Plasma	Donor's Group
A	A ✓	anti-B ✓	(A) (O)
B	B ✓	anti-A ✓	(B) (O)
✓ AB (U.R.)	A, B ✓	(nil) ✗	(AB) (A) (B) (O)
✓ O (U.D)	(nil) ✗	anti-A, B ✓	(O)



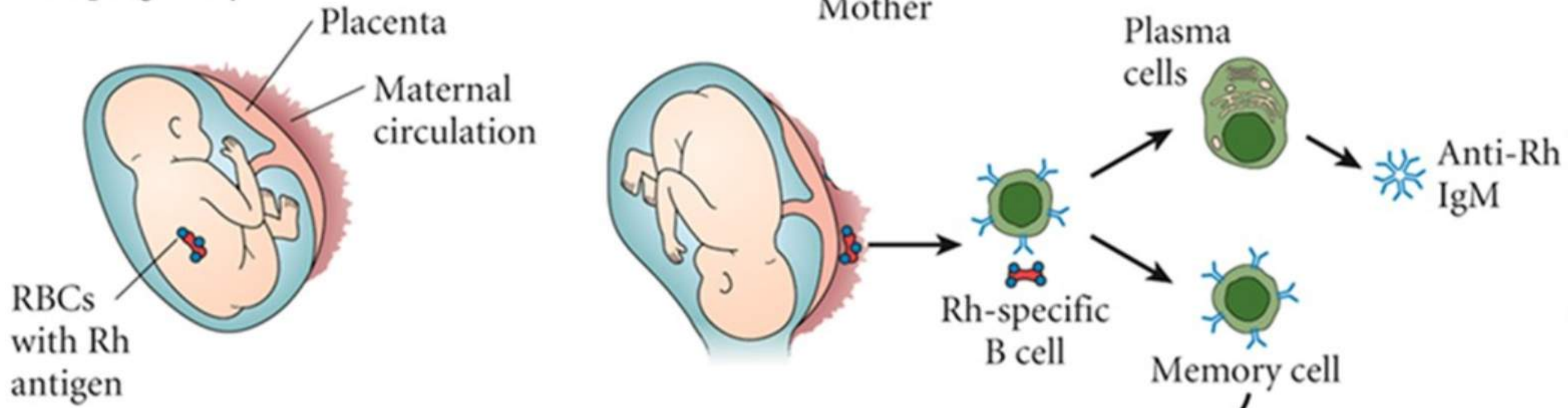
Plasma



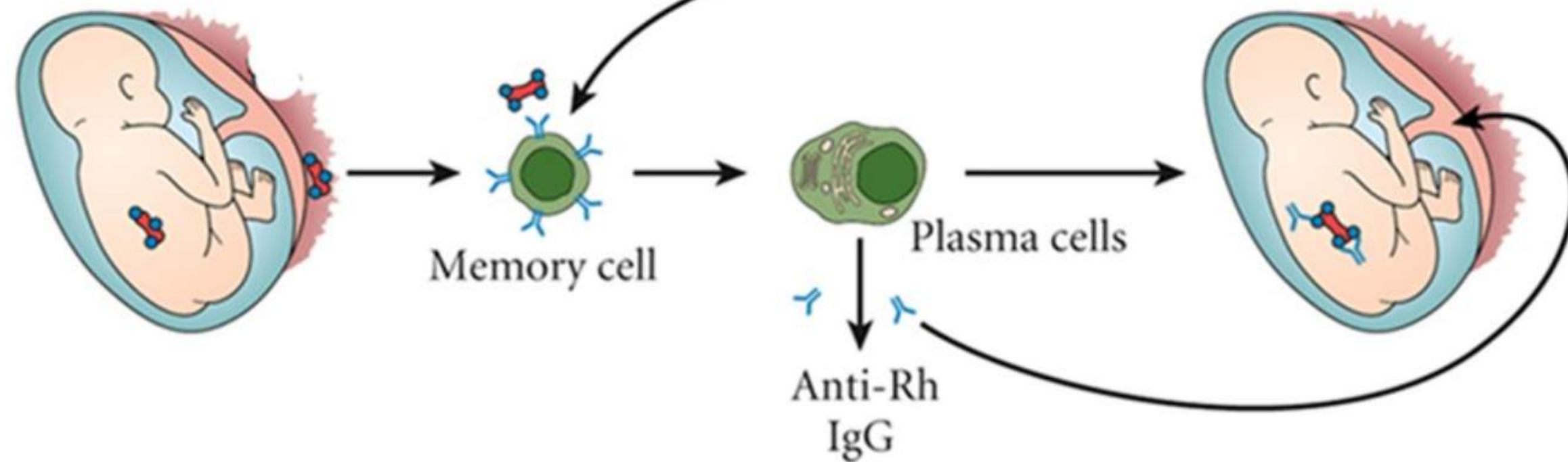


# Erythroblastosis fetalis

First pregnancy



Second pregnancy

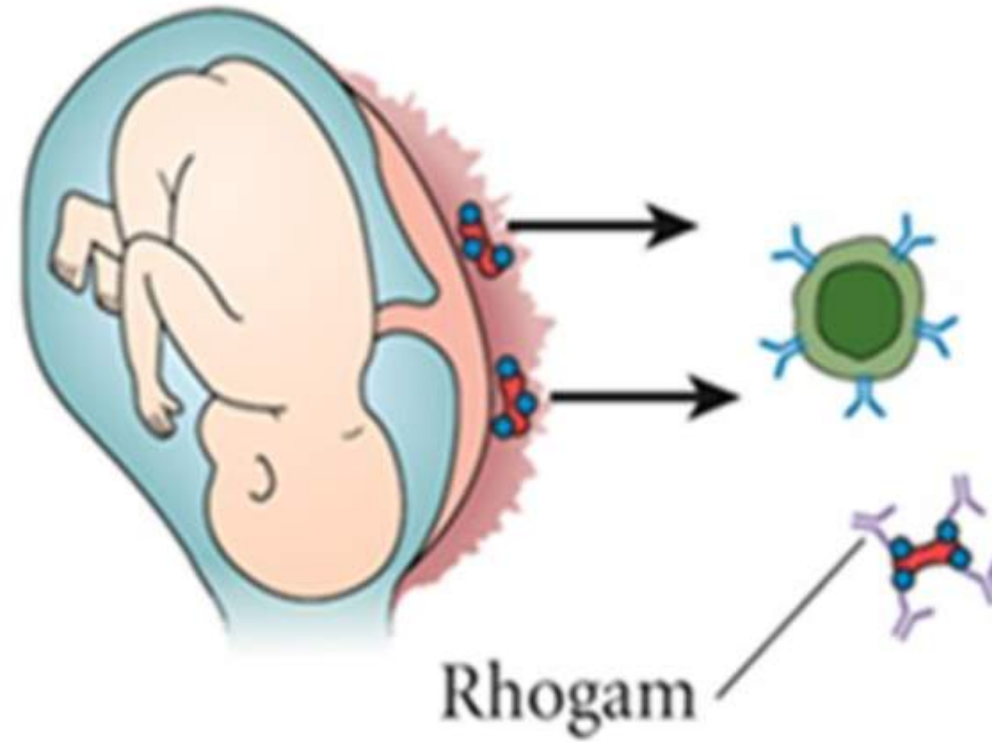
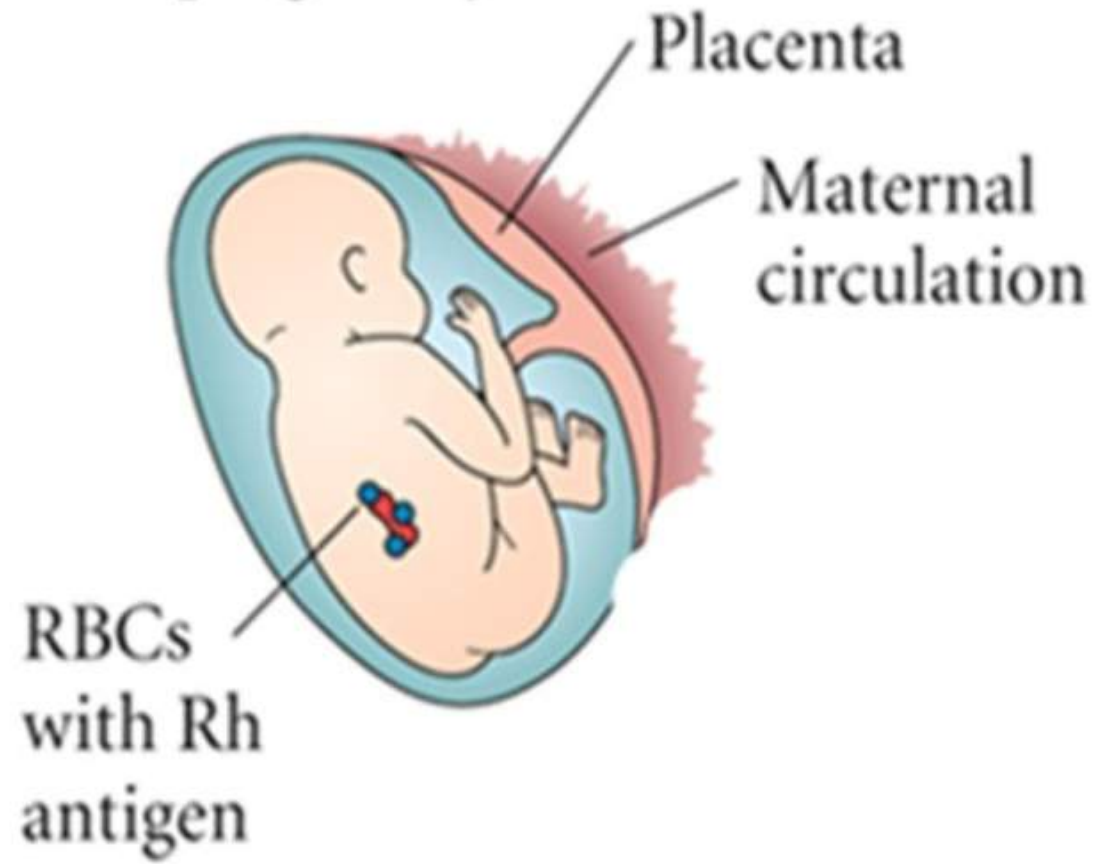


Prevention with Rhogam

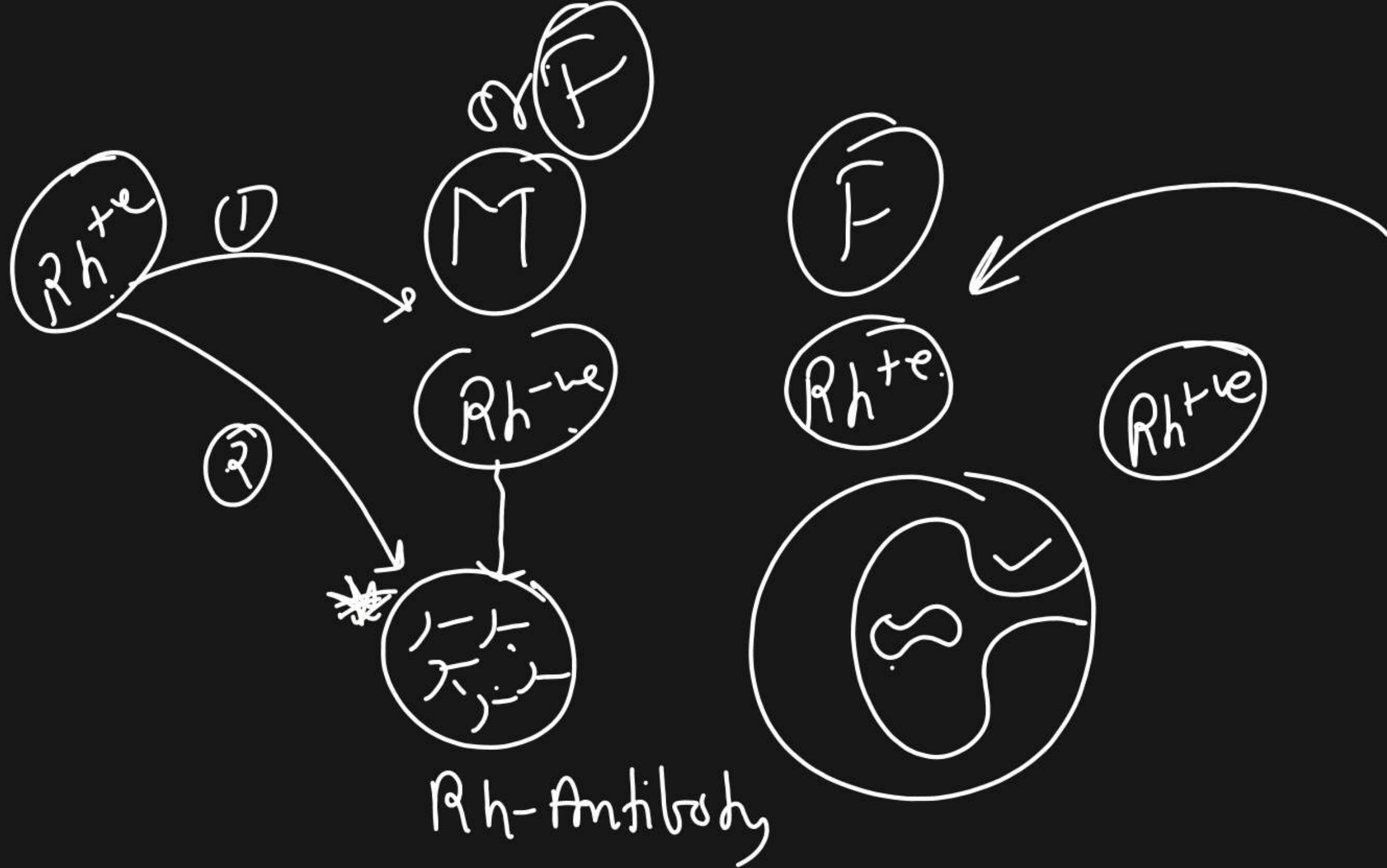
First pregnancy

Mother treated with the anti-Rh antibody Rhogam

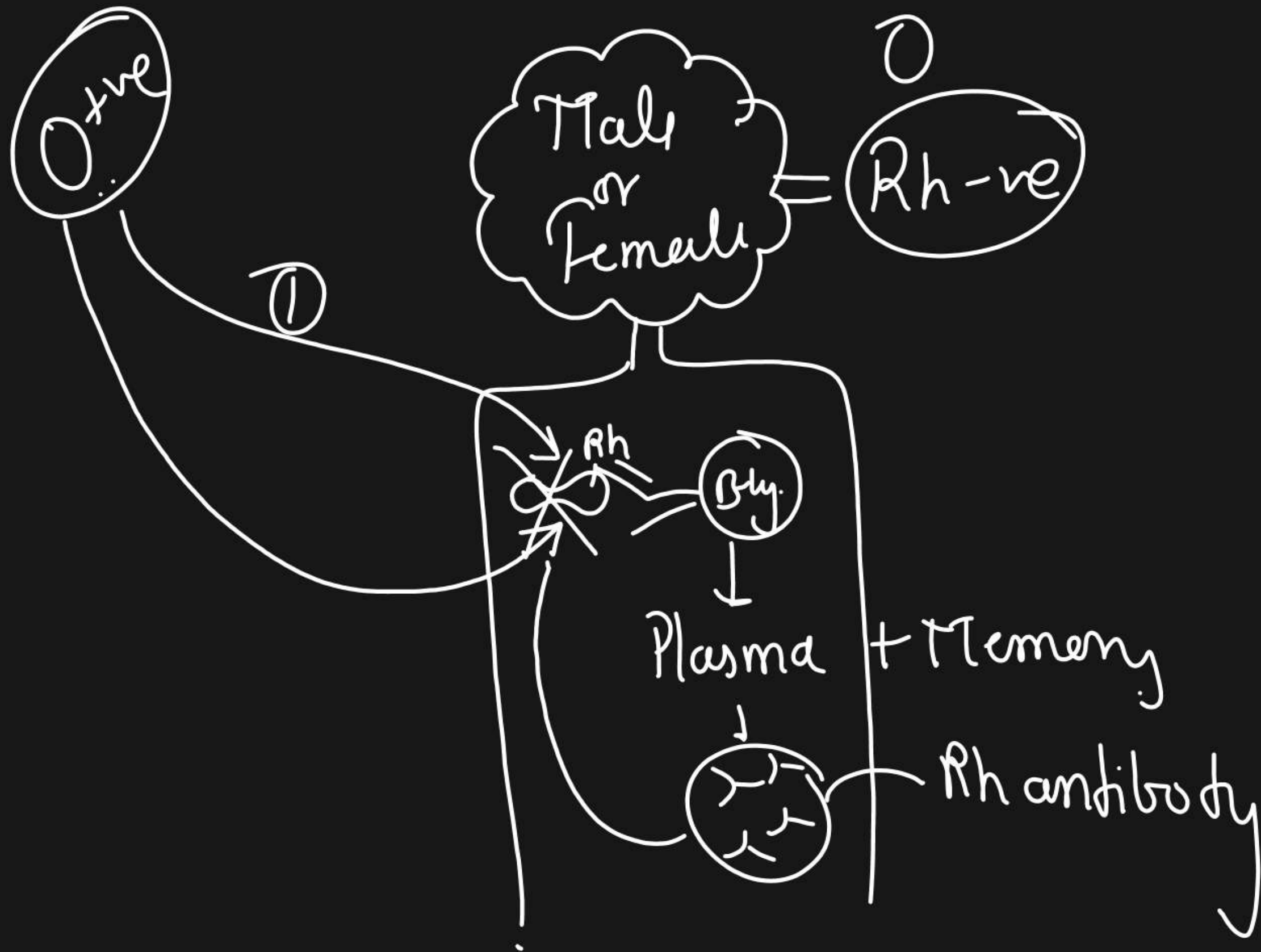
Mother













# *Doubts and Discussion*





The background is a dark, moody photograph of an industrial interior. A horizontal light fixture is mounted on a wall, casting a soft glow. The wall itself has a textured, possibly metallic or concrete, appearance. The overall atmosphere is mysterious and focused on the central text.

**SUMMARY**

**PART- 2**

**HEART**

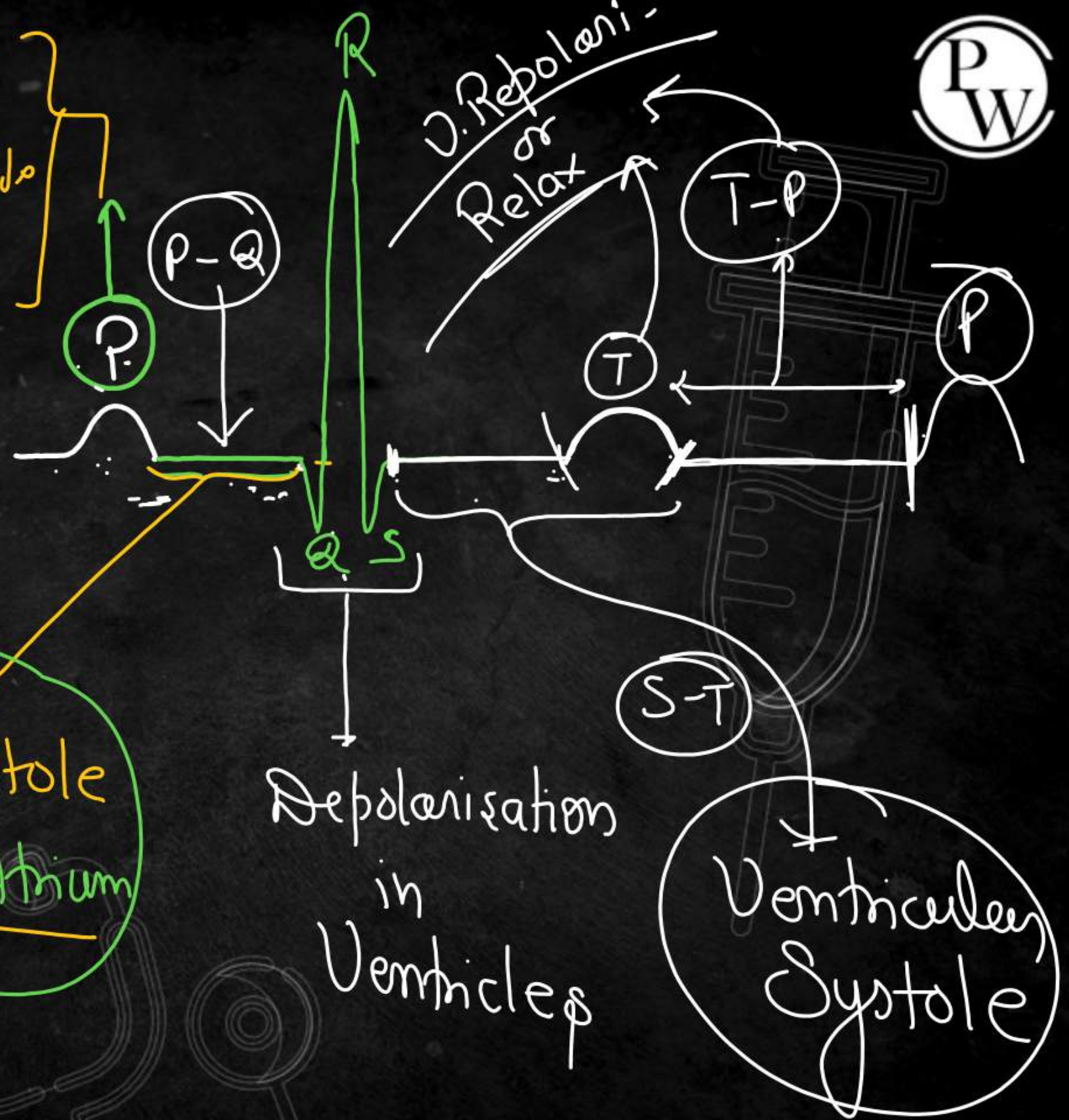


# E.C.G.

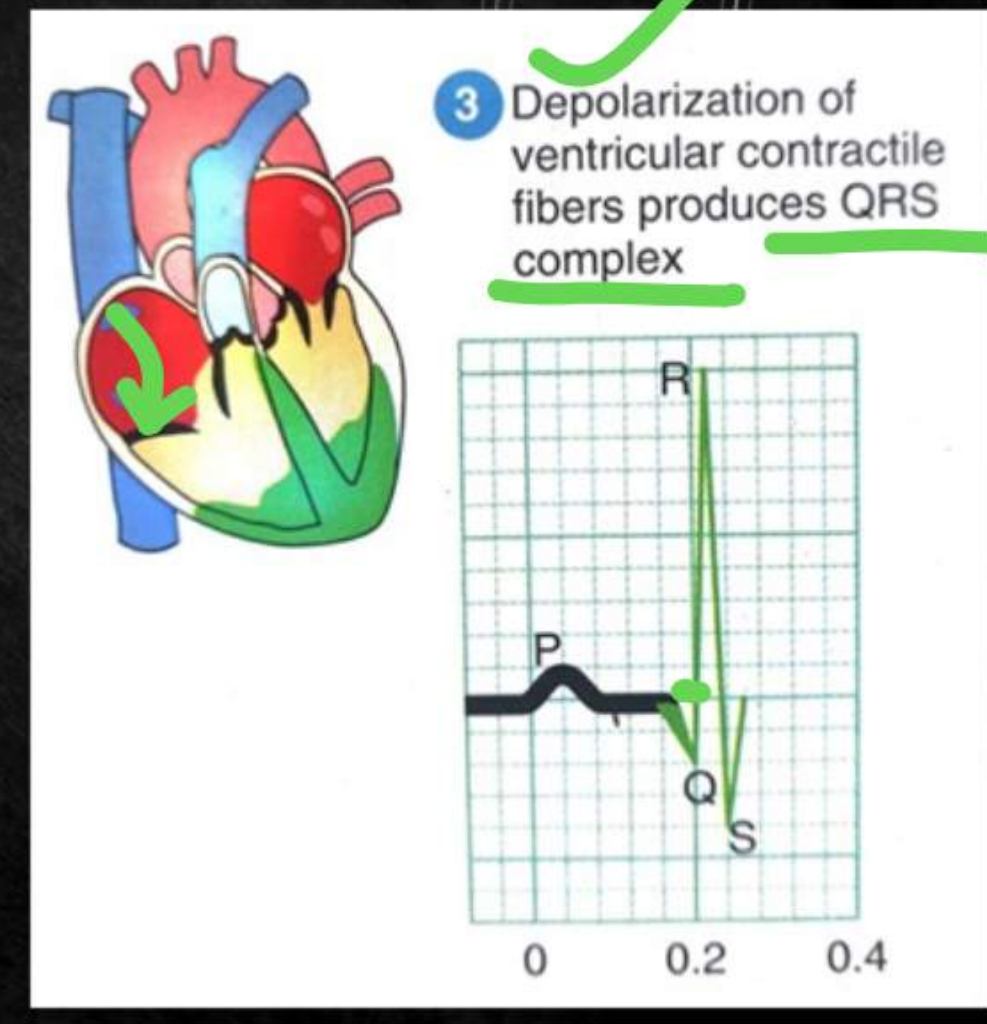
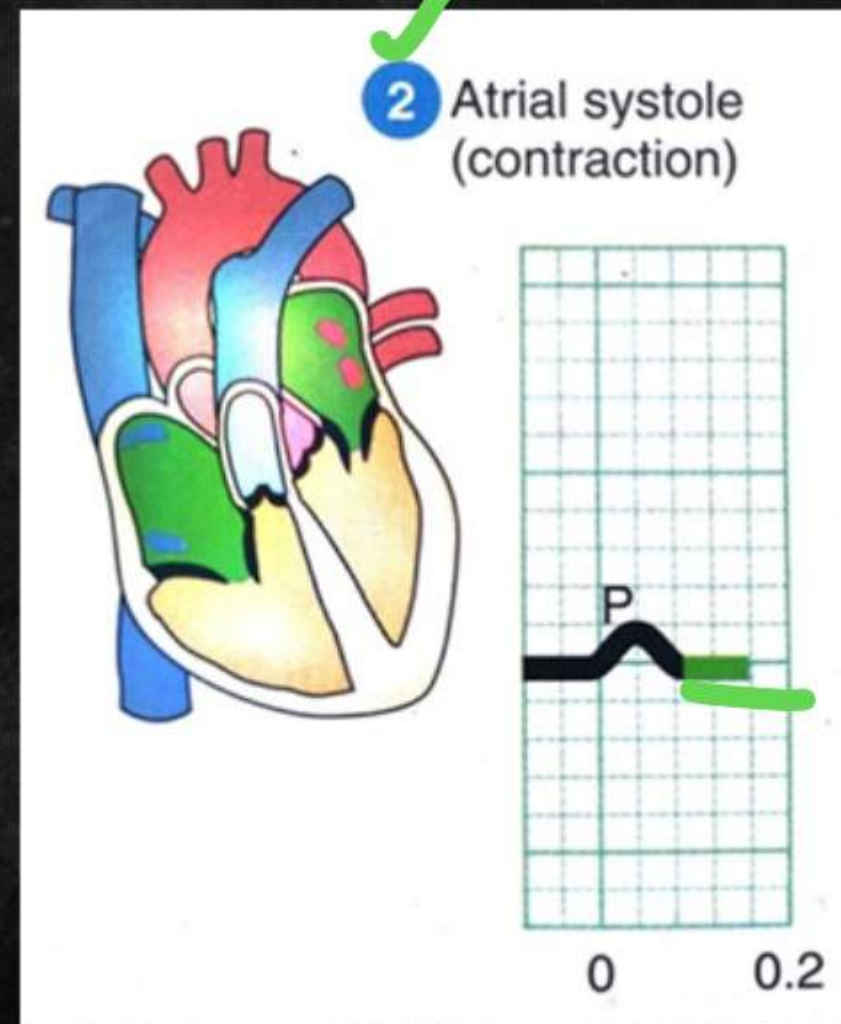
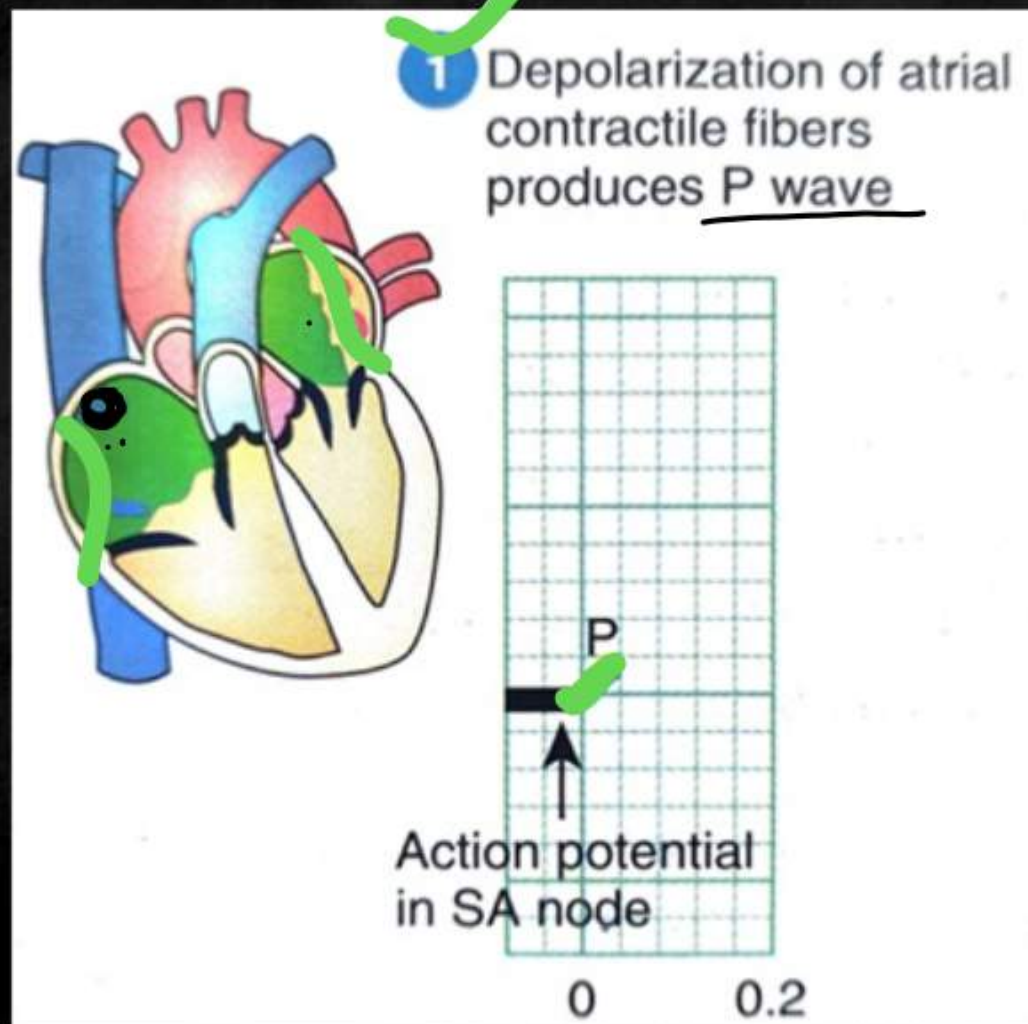
Depolarization  
or  
A.P. in S.A. Node  
or  
Atrium



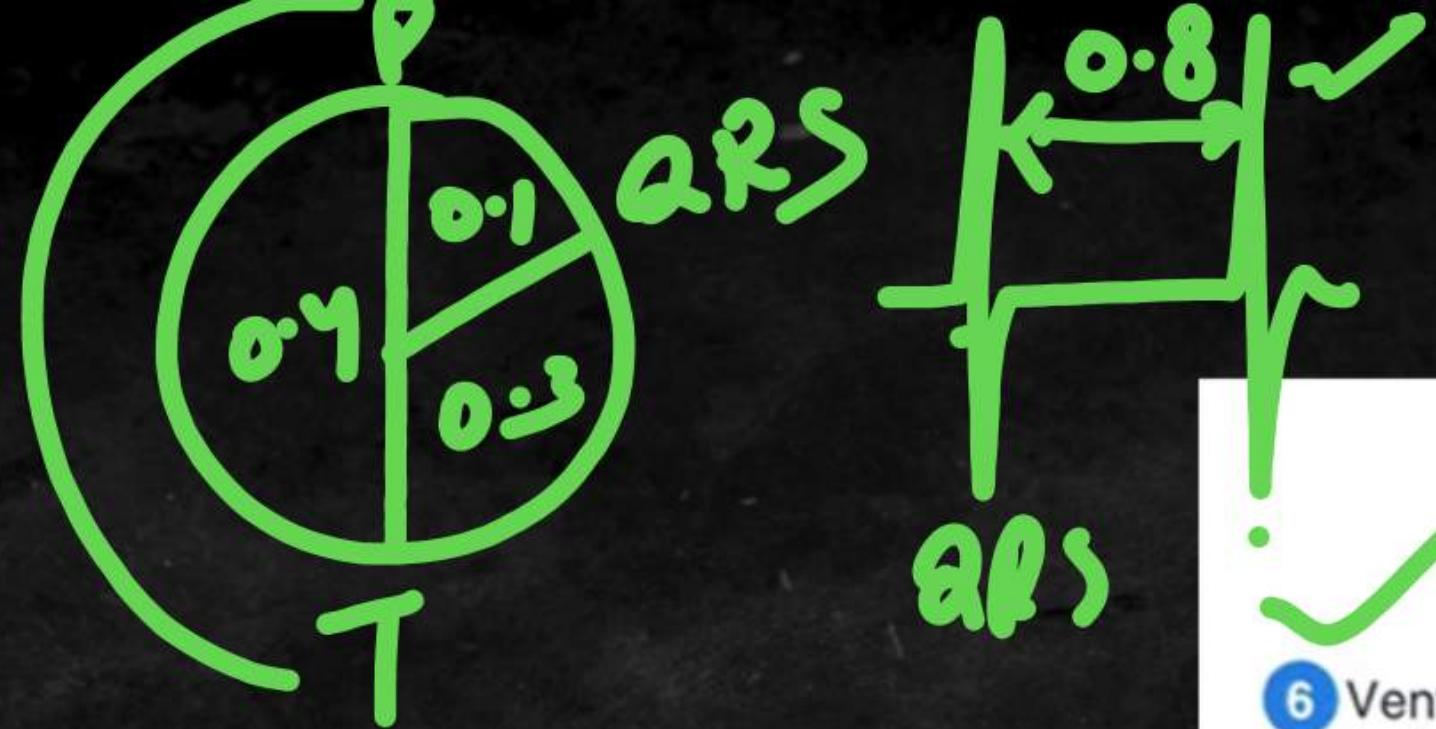
Systole  
in Atrium





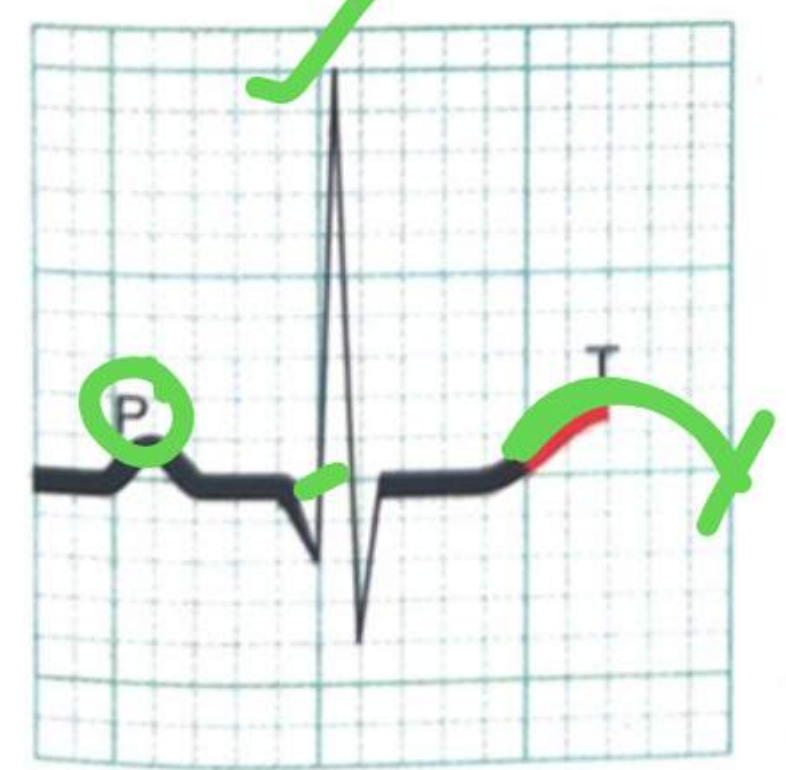
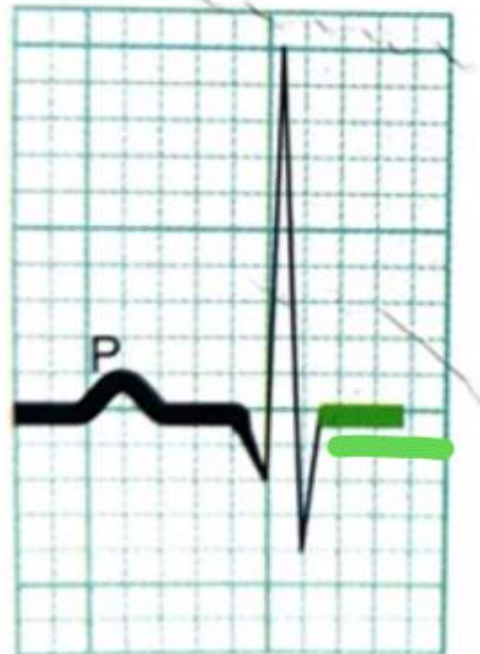




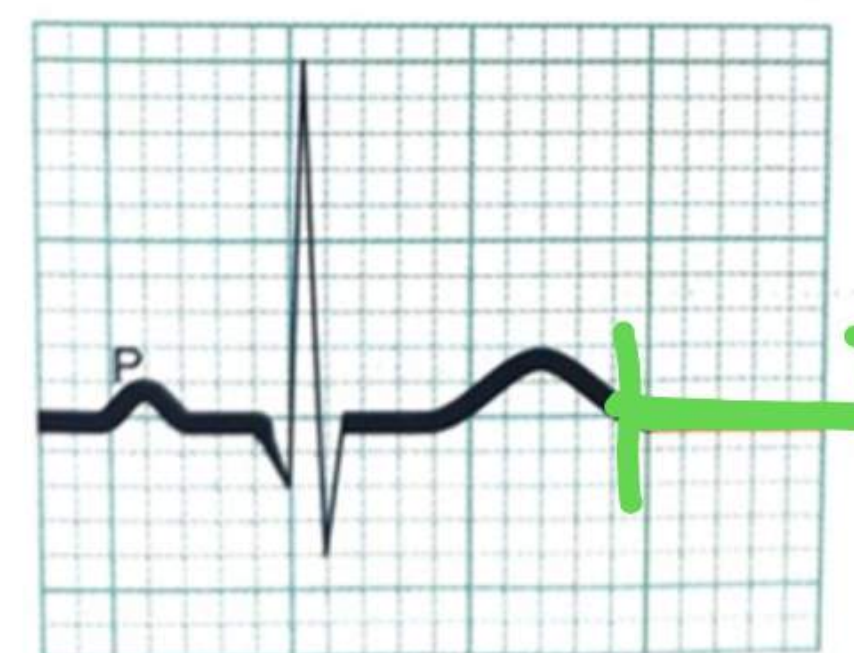
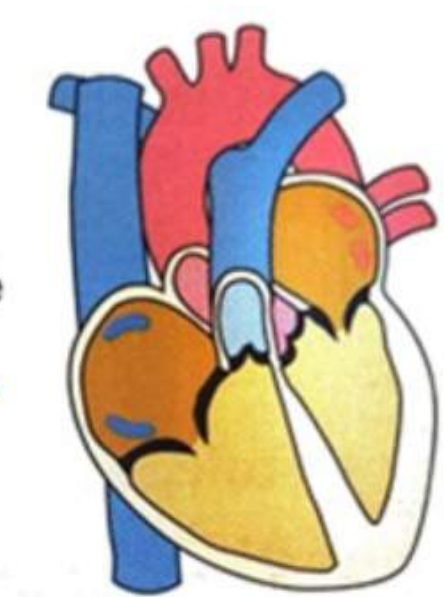


08

4 Ventricular systole (contraction)



6 Ventricular diastole (relaxation)









# *Doubts and Discussion*







If cardiac supply of vagus nerve is cut then:

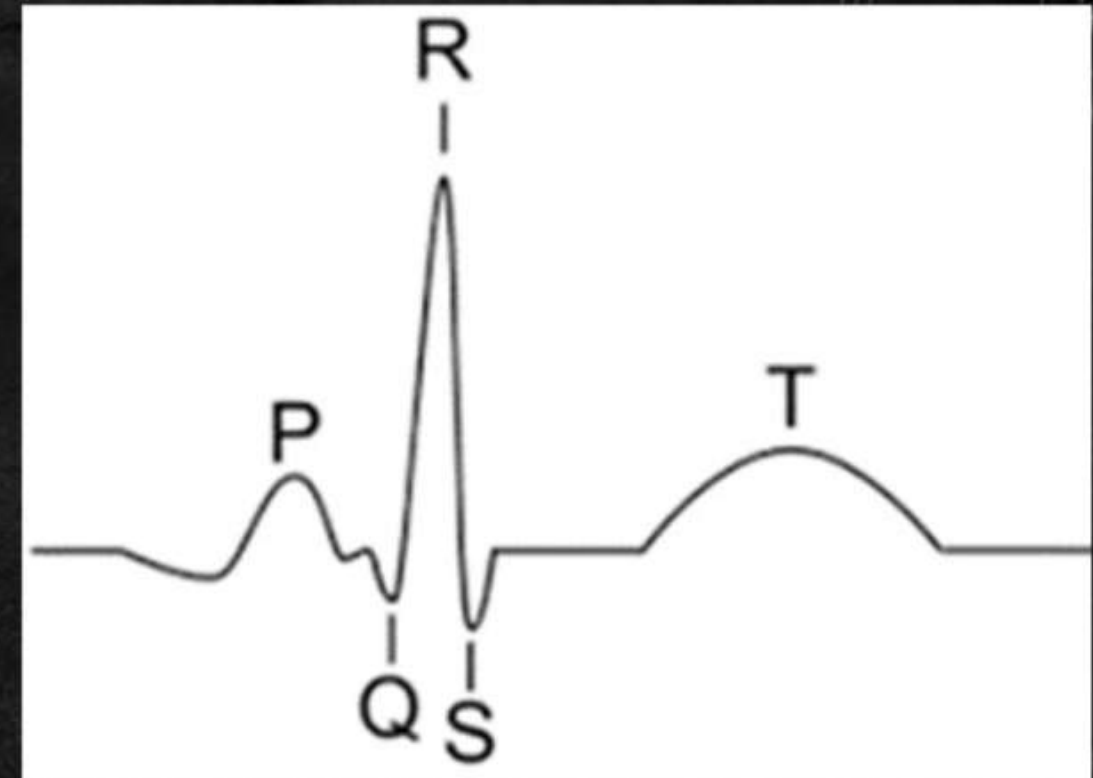
- (A) Rate of heart beat increases. ✓
- (B) Rate of heart beat decreases.
- (C) There is no change in heartbeat.
- (D) Heart stops beating.





Given below is the ECG of a normal human. Which one of its components is correctly interpreted below:

- ☒ (A) Peak P and R together- systolic and diastolic pressures
- ☒ (B) Peak P – initiation of left atrial contraction only
- ☒ (C) Complex QRS- one complete pulse
- ☒ (D) Peak T- initiation of total cardiac contraction





Bundle of His is a network of

- (A) Muscle fibres distributed throughout the heart walls
- (B) Nerve fibers found throughout the heart
- (C) Nerve fibers distributed in ventricles
- ☒ (D) Muscle fibres found only in the ventricle wall





Cardiac output is defined as the amount of blood:

- (A) Pumped by both ventricles per second
- (B) Received in heart per minute
- (C) Pumped by each ventricle per minute
- (D) Pumped by left atrium per minute





Glucose is carried from digestive tract to liver by

- (A) Hepatic artery
- (B) Hepatic portal vein
- ☒ (C) Pulmonary vein
- (D) None of the above





What among the following is not detected by ECG?

- (A) Heart block
- (B) Valvular defects
- (C) Myocardial infection
- (D) Arrhythmia





How many cardiac cycles are performed per minute in humans?

(A) 1  
(C) 27

(B) 12  
(D) 72





If one L of blood is drawn out of 5 L from the body of man,  
how much blood would be left by the next day?

☒ (A) 5 L  
(C) 4 L

(B) 4.5 L  
(D) 3 L





The duration of the ventricular diastole in a normal cardiac cycle is

- (A) 0.3 second
- (B) 0.5 second
- (C) 0.4 second
- (D) 0.7 second





The course of blood from the heart to the lungs and back to the heart is called

- (A) Systemic circulation
- ✓ (B) Pulmonary circulation
- (C) Single circulation
- (D) Double circulation



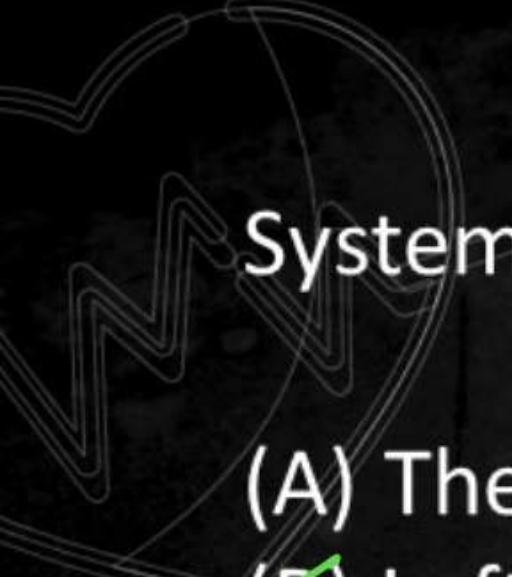


Which one of the following statements is correct regarding blood pressure?

- ✓ (A) 190/110 mm Hg may harm vital organs like brain and kidney
- ✗ (B) 130/90 mm Hg is considered high and ✗ requires treatment
- ✗ (C) 100/55 mm Hg is considered an ideal blood pressure
- ✗ (D) 105/50 mm Hg makes one very active







Systemic heart refers to

- (A) The heart that contracts under stimulation from nervous system
- ✓ (B) Left auricle and left ventricle in higher vertebrates
- (C) Entire heart in lower vertebrates
- (D) The two ventricles together in humans





The cardiac pacemaker in a patient fails to function normally. The doctors find that an artificial pacemaker is to be grafted in him. It is likely that it will be grafted at the site of

- (A) Atrioventricular bundle
- (B) Purkinje system
- ☒ (C) Sinoatrial node
- (D) Atrioventricular node





The heart sound 'dup' is produced when

- (A) Mitral valve is closed
- ☒ (B) Semilunar valves at the base of aorta get closed
- (C) Tricuspid valve is opened
- (D) Mitral valve is opened







THANK

YOU !!!

